ABSTRACT

Admission control for parameterized traffic among wireless stations and an access point takes into account time varying channel capacity as well as loss characteristics of the wireless channel in guaranteeing specified quality-of-service (QoS). In addition, transmission burstiness, which is a difference between a minimum transmission rate specified by the station and a current transmission rate, is used to increase the bandwidth guaranteed at admission. Both size overhead, as from packet headers, and time overhead, as from polling, is taken into account in an admission process that converts a guaranteed transmission rate into air time units. Efficient admission control is accomplished using a minimal subset of the standard parameters specified by the wireless station.